

Amendments to the Claims:

Please amend the claims as follows without prejudice or disclaimer. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of protecting a conductor in a micromachined device, said method comprising:

 providing a substrate for a micromachined device;

 providing a conductor as part of said micromachined device for use in conducting electrical signals during operation of said micromachined device;

 providing a protective covering for said conductor so that said conductor is disposed between said substrate and said protective covering and so that said protective covering is configured so as to form a tunnel relative to said conductor.
2. (original) The method as described in claim 1 wherein said protective covering comprises polysilicon.
3. (original) The method as described in claim 1 wherein said providing a protective covering comprises depositing said protective covering as a layer of material.
4. (original) The method as described in claim 3 wherein said layer of material protects a plurality of conductors.
5. (original) The method as described in claim 1 and further comprising:

electrically coupling said protective covering with said substrate so as to configure a ground ring around said conductor.

6. (Cancelled)

7. (original) The method as described in claim 1 and further comprising:
not depositing a passivation layer over an active mechanical component of said micromachined device.

8-14 (cancelled)

15. (Currently amended) A method of protecting a conductor in a micromachined device, said method comprising:

providing a micromachined device comprising a substrate;

providing a conductor as part of said micromachined device;

providing as part of said micromachined device a protective covering, wherein said conductor is disposed between said protective covering and said substrate of said micromachined device and wherein said protective layer of material is configured so as to form a tunnel relative to said conductor.

16. (original) The method as described in claim 15 wherein said providing a protective covering comprises utilizing polysilicon as said protective covering.

17. (original) The method as described in claim 15 wherein said providing said protective covering comprises depositing said protective covering as a layer of material.

18. (original) The method as described in claim 17 wherein said layer of material protects a plurality of conductors.

19. (original) The method as described in claim 15 and further comprising:
electrically coupling said protective covering with said substrate so as to configure a ground ring around said conductor.

20. (Cancelled)

21. (original) The method as described in claim 15 and further comprising:
not depositing a passivation layer over an active mechanical component of said micromachined device.

22-31 (cancelled)

32. (Currently amended) A method of providing a micromachined apparatus, said method comprising:

providing a substrate;

disposing a bonding pad over said substrate;

disposing a conductor over said substrate, wherein said conductor is electrically coupled with said bonding pad;

disposing an active mechanical component over said substrate, wherein said active mechanical component is configured to move relative to said substrate during operation of said micromachined apparatus;

disposing a protective cover over said conductor so that said conductor is disposed between said protective covering and said substrate and so that said protective cover is configured so as to form a tunnel relative to said conductor.

33. (original) The method as described in claim 32 wherein said active mechanical component comprises a mirror.

34. (original) The method as described in claim 33 wherein said mirror comprises silicon.

35. (Currently amended) The method as described in claim 32 wherein said active mechanical component is exposed to the atmosphere ~~atmosphere~~ during operation of said micromachined apparatus.

36. (original) The method as described in claim 32 wherein a portion of said conductor is exposed to the atmosphere during operation of said micromachined apparatus.

37. (original) The method as described in claim 32 wherein said protective cover comprises polysilicon.

38. (original) The method as described in claim 32 wherein said protective cover is operable so as to protect said conductor from an electrical short when a voltage of at least 100 Volts is applied to said protective cover.

39. (original) The method as described in claim 32 and further comprising:

electrically coupling said protective cover with said substrate so as to configure a ground ring around said conductor.

40. (Cancelled)

41. (original) The method as described in claim 32 and further comprising:
not depositing a passivation layer over an active mechanical component of said micromachined apparatus.

42. (Currently amended) A method of configuring a micromachined apparatus, said method comprising:

providing a bonding pad as part of said micromachined apparatus;
providing an active mechanical component, wherein said active mechanical component is configured to move during operation of said micromachined apparatus;
disposing a conductor between said active mechanical component and said bonding pad;
protecting at least a portion of said conductor disposed between said active mechanical component and said bonding pad with a protective layer of material operable to protect said conductor from electrical shorts and configured so as to form a tunnel relative to said conductor.

43. (original) The method as described in claim 42 wherein said providing an active mechanical component comprises providing a mirror.

44. (original) The method as described in claim 42 and further comprising configuring said active mechanical component so as to be exposed to the atmosphere during operation of said micromachined apparatus.

45. (original) The method as described in claim 42 wherein said protective layer of material protects said conductor when a voltage of at least 100 Volts is applied to said protective layer of material.

46. (original) The method as described in claim 42 and further comprising:
configuring said protective layer of material so as to form at least part of a ground ring around said conductor.

47. (cancelled)

48. (original) The method as described in claim 42 and further comprising:
not depositing a passivation layer over said active mechanical component.

49-55 (cancelled)

56. (Currently amended) A method comprising:
providing a substrate;
disposing a conductor over said substrate operable for conducting electrical signals;

configuring an equipotential barrier at least partially around said conductor operable for protecting said conductor from electrical shorts, wherein said configuring said equipotential barrier comprises:

configuring a tunnel of electrically conductive material over said conductor; and
coupling said electrically conductive material with said substrate.

57. (original) The method as described in claim 56 wherein said configuring an equipotential barrier comprises:

depositing polysilicon over said conductor; and
electrically coupling said polysilicon with said substrate so as to form an equipotential ring.

58. (original) The method as described in claim 57 and further comprising:
electrically coupling said equipotential ring to a circuit ground.

59. (Cancelled)

60. (original) The method as described in claim 59 and further comprising:
electrically coupling said equipotential barrier to a circuit ground.

61-65 (Cancelled)

66. (New) A method of protecting a conductor in a micromachined device, said method comprising:

providing a substrate for a micromachined device;
providing a conductor as part of said micromachined device for use in conducting
electrical signals during operation of said micromachined device;
providing a protective covering for said conductor so that said conductor is disposed
between said substrate and said protective covering;
electrically coupling said protective covering with said substrate so as to configure a
ground ring around said conductor.

67. (New) The method as described in claim 66 wherein said protective covering
comprises polysilicon.

68. (New) The method as described in claim 66 wherein said providing a protective
covering comprises depositing said protective covering as a layer of material.

69. (New) The method as described in claim 68 wherein said layer of material
protects a plurality of conductors.

70. (New) The method as described in claim 66 and further comprising:
not depositing a passivation layer over an active mechanical component of said
micromachined device.

71. (New) A method of providing a micromachined apparatus, said method
comprising:
providing a substrate;

disposing a bonding pad over said substrate;

disposing a conductor over said substrate, wherein said conductor is electrically coupled with said bonding pad;

disposing an active mechanical component over said substrate, wherein said active mechanical component is configured to move relative to said substrate during operation of said micromachined apparatus;

disposing a protective cover over said conductor so that said conductor is disposed between said protective covering and said substrate;

electrically coupling said protective cover with said substrate so as to configure a ground ring around said conductor.

72. (New) The method as described in claim 71 wherein said active mechanical component comprises a mirror.

73. (New) The method as described in claim 72 wherein said mirror comprises silicon.

74. (New) The method as described in claim 71 wherein said active mechanical component is exposed to the atmosphere during operation of said micromachined apparatus.

75. (New) The method as described in claim 71 wherein a portion of said conductor is exposed to the atmosphere during operation of said micromachined apparatus.

76. (New) The method as described in claim 71 wherein said protective cover comprises polysilicon.

77. (New) The method as described in claim 71 wherein said protective cover is operable so as to protect said conductor from an electrical short when a voltage of at least 100 Volts is applied to said protective cover.

78. (New) The method as described in claim 71 and further comprising:
not depositing a passivation layer over an active mechanical component of said micromachined apparatus.

79. (New) A method of configuring a micromachined apparatus, said method comprising:
providing a bonding pad as part of said micromachined apparatus;
providing an active mechanical component, wherein said active mechanical component is configured to move during operation of said micromachined apparatus;
disposing a conductor between said active mechanical component and said bonding pad;
protecting at least a portion of said conductor disposed between said active mechanical component and said bonding pad with a protective layer of material operable to protect said conductor from electrical shorts;
configuring said protective layer of material so as to form at least part of a ground ring around said conductor.

80. (New) The method as described in claim 79 wherein said providing an active mechanical component comprises providing a mirror.

81. (New) The method as described in claim 79 and further comprising configuring said active mechanical component so as to be exposed to the atmosphere during operation of said micromachined apparatus.

82. (New) The method as described in claim 79 wherein said protective layer of material protects said conductor when a voltage of at least 100 Volts is applied to said protective layer of material.

83. (New) The method as described in claim 79 and further comprising:
not depositing a passivation layer over said active mechanical component.